

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An isolated nucleic acid molecule encoding a BEL transcription factor from *Solanum tuberosum*, wherein said isolated nucleic acid molecule:
 - (a) comprises the nucleotide sequence of SEQ ID NO:1; or
 - (b) ~~comprises a nucleotide sequence that has at least 90% sequence homology to the nucleotide sequence of SEQ ID NO:1, and that encodes a protein or polypeptide that comprises an amino acid sequence that has at least 90% sequence homology to the amino acid sequence of SEQ ID NO:2 by basic BLAST using default parameters analysis; or~~
 - (b) ~~(e)~~ hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in a transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions; or
 - (c) ~~(d)~~ encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.
2. (Previously Presented) The isolated nucleic acid molecule according to claim 1, wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.
3. (Canceled)
4. (Currently Amended) The isolated nucleic acid molecule according to claim 1, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in a transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions.

5. (Previously Presented) The isolated nucleic acid molecule according to claim 1, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.

6. (Canceled)

7. (Original) A DNA construct comprising:
the nucleic acid molecule according to claim 1, and
an operably linked promoter and 3' regulatory region.

8. (Original) An expression vector comprising the DNA construct of
claim 7.

9. (Original) The expression vector according to claim 8, wherein the
nucleic acid molecule is in proper sense orientation and correct reading frame.

10. (Original) A host cell transduced with the nucleic acid molecule
according to claim 1.

11. (Previously Presented) The host cell according to claim 10, wherein
the cell is selected from the group consisting of a bacterial cell, a virus, a yeast cell, an insect
cell, a plant cell, and an isolated mammalian cell.

12. (Original) A transgenic plant transformed with the nucleic acid
molecule according to claim 1.

13. (Previously Presented) The transgenic plant according to claim 12,
wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.

14. (Canceled)

15. (Currently Amended) The transgenic plant according to claim 12, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in the transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions.

16. (Previously Presented) The transgenic plant according to claim 12, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.

17. (Canceled)

18. (Original) The transgenic plant according to claim 12, wherein the plant is selected from the group consisting of Gramineae, Liliaceae, Iridaceae, Orchidaceae, Salicaceae, Ranunculaceae, Magnoliaceae, Cruciferae, Rosaceae, Leguminosae, Malvaceae, Umbelliferae, Labiatae, Solanaceae, Cucurbitaceae, Compositae, and Rubiaceae.

19. (Original) A transgenic plant seed transformed with the nucleic acid molecule according to claim 1.

20. (Previously Presented) The transgenic plant seed according to claim 19, wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.

21. (Canceled)

22. (Currently Amended) The transgenic plant seed according to claim 19, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in a transgenic plant grown from the transgenic plant seed results in tuber formation in the transgenic plant when grown under long-day conditions.

23. (Previously Presented) The transgenic plant seed according to claim 19, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.

24. (Canceled)

25. (Original) The transgenic plant seed according to claim 19, wherein the plant seed is selected from the group consisting of Gramineae, Liliaceae, Iridaceae, Orchidaceae, Salicaceae, Ranunculaceae, Magnoliaceae, Cruciferae, Rosaceae, Leguminosae, Malvaceae, Umbelliferae, Labiatae, Solanaceae, Cucurbitaceae, Compositae, and Rubiaceae.

Claims 26-42 (Canceled)

43. (Previously Presented) A method for increasing rate of growth of a plant comprising:

transforming a plant with the DNA construct according to claim 7, whereby the rate of growth of the plant is increased.

44. (Previously Presented) The method according to claim 43, wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.

45. (Canceled)

46. (Currently Amended) The method according to claim 43, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in the transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions.

47. (Previously Presented) The method according to claim 43, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.

48. (Canceled)

49. (Original) The method according to claim 43, wherein the plant is selected from the group consisting of Gramineae, Liliaceae, Iridaceae, Orchidaceae, Salicaceae, Ranunculaceae, Magnoliaceae, Cruciferae, Rosaceae, Leguminosae, Malvaceae, Umbelliferae, Labiatae, Solanaceae, Cucurbitaceae, Compositae, and Rubiaceae.

Claims 50-56 (Canceled)

57. (Previously Presented) The DNA construct according to claim 7, wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.

58. (Canceled)

59. (Currently Amended) The DNA construct according to claim 7, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in a transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions.

60. (Previously Presented) The DNA construct according to claim 7, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.

61. (Previously Presented) The expression vector according to claim 8, wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.

62. (Canceled)

63. (Currently Amended) The expression vector according to claim 8, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in a transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions.

64. (Previously Presented) The expression vector according to claim 8, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.

65. (Previously Presented) The host cell according to claim 10, wherein the nucleic acid molecule has the nucleotide sequence of SEQ ID NO:1.

66. (Canceled)

67. (Currently Amended) The host cell according to claim 10, wherein the nucleic acid molecule hybridizes to the nucleotide sequence of SEQ ID NO:1 under high stringency conditions characterized by hybridization in a buffer of 4-5X SSC/0.1% w/v SDS at 54°C for 1-3 hours and in 4X SSC at 65°C, followed by a washing in 0.1X SSC at 65°C for about one hour, wherein overexpression of the BEL transcription factor in a transgenic plant results in tuber formation in the transgenic plant when grown under long-day conditions.

68. (Previously Presented) The host cell according to claim 10, wherein the nucleic acid molecule encodes a protein or polypeptide comprising the amino acid sequence of SEQ ID NO:2.